

Claim Listing

1.-24. Canceled.

1 **25.** (Amended.) A method for protecting a material from tick or cockroach infestation,
2 comprising treating the material with an effective amount of a compound selected from the
3 group consisting of nootkatone, α -cedrene, zizanol, and bicyclovetivenol, wherein the
4 treated material repels or kills ticks substantially more than does an otherwise identical
5 material that has not been treated with the compound.

1 **26.** A method as in Claim 25, wherein the treated material repels ticks.

1 **27.** A method as in Claim 25, wherein the treated material kills ticks.

1 **28.** A method as in Claim 25, wherein the material is selected from a group consisting
2 of soil, synthetic polymers, diatomaceous earth, sand, and cellulose-containing materials.

1 **29.** A method as in Claim 25, wherein the compound is nootkatone.

1 **30.** A method as in Claim 25, wherein the compound is α -cedrene.

1 **31.** A method as in Claim 25, wherein the compound is zizanol.

1 **32.** A method as in Claim 25, wherein the compound is bicyclovetivenol.

1 **33.** A method as in Claim 25, additionally comprising treating the material with one or
2 more additional, different compounds selected from the group consisting of nootkatone,
3 α -cedrene, zizanol, and bicyclovetivenol.

4 **34. - 46.** Cancelled.

1 **47.** A topical composition for application to the skin or fur of a mammal for protection
2 against ticks, said composition comprising an effective amount of a compound selected
3 from the group consisting of nootkatone, α -cedrene, zizanol, and bicyclovetivenol, and a
4 pharmaceutically accepted carrier, wherein said composition when applied topically repels
5 or kills ticks substantially more than does an otherwise identical composition that lacks the
6 compound.

1 **48.** A composition as in Claim 47, wherein said compound is nootkatone.

1 **49.** A composition as in Claim 48, wherein the concentration of nootkatone in said
2 composition is between about 10 $\mu\text{g/g}$ and about 1000 $\mu\text{g/g}$.

1 **50.** A composition as in Claim 48, wherein the concentration of nootkatone in said
2 composition is between about 10 $\mu\text{g/g}$ and about 200 $\mu\text{g/g}$.

1 **51.** A composition as in Claim 47, wherein said compound is zizanol.

1 **52.** A composition as in Claim 47, wherein said compound is bicyclovetivenol.

1 **53.** A composition as in Claim 47, wherein said compound is α -cedrene.

1 **54.** A composition as in Claim 47, additionally comprising a composition with a one or
2 more additional, different compounds selected from the group consisting of nootkatone,
3 α -cedrene, zizanol and bicyclovetivenol.

55. - 74. Cancelled.

1 **75.** A method as in Claim 25, wherein the treated material repels cockroaches.